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#### **BEFORE THE**

#### FEDERAL COMMUNICATIONS COMMISSION

NUN 1 4 1991

WASHINGTON, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

In the Matter of	)	
	)	/
Amendment of Parts 2, 21 and 94	)	RM - 7722 /
of the Commission's Rules	)	
Concerning Channel Assignments	)	/
in the 27.5-29.5 GHz Band	Ś	/

To: The Commission

#### **COMMENTS**

CALLING COMMUNICATIONS CORPORATION

Edward F. Tuck President

1900 West Garvey Avenue South Suite 200 West Covina, California 91790 (818) 856-0671

June 14, 1991



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#### **COMMENTS**

Calling Communications Corporation ("Calling") hereby comments on the Petition of Harris Corporation -- Farinon Division ("Harris") to amend Parts 2, 21 and 94 of the Commission's Rules to adopt a channelization plan for the 27.50-29.50 GHz band (the "28 GHz band") and to make that band available for assignment under Part 94 in addition to Part 21 ("Petition").

#### I. INTRODUCTION

Calling is a California corporation with its headquarters in West Covina, California. Calling's business is novel application of state-of-the-art microwave technologies to provide telecommunications services to traditional and emerging markets.

Calling is concerned that the Harris Petition, and the Commission's action thereon, not preclude other innovative uses of the 28 GHz band. Calling is interested in facilitating efficient utilization of those frequency bands to all allocated services, and encouraging the implementation of advanced technologies in this band.

#### II. BACKGROUND

The 28 GHz band is allocated to the Fixed, Mobile and Fixed-Satellite (Earth-to-space) Services on a co-primary basis in the United States. 1/ Only the Fixed Service (common carrier) and Fixed-Satellite Service ("FSS") allocations have been implemented

1/ See, 47 C.F.R. § 2.106.

in the Commission's Rules.2/ Mobile Service has not yet been implemented by the Commission to the best of Calling's knowledge.

#### III. SUMMARY OF THE HARRIS PETITION

Harris points out that although the 28 GHz band has been available for point-to-point microwave operations for over thirty (30) years, there has been little use of the band for such purposes. Harris attributes this lack of use to propagation limitations, the lack of equipment, and the historic availability of lower frequencies for point-to-point microwave uses. 3/ Harris cites increasing congestion at the lower microwave frequencies and the need to interconnect cellular base station transmitters (cell sites) to each other and to switching equipment as the reasons for the Petition. 4/ Harris argues that a channelization plan for the 28 GHz band and making that band available for assignment under Part 94 is timely and necessary for Harris and other equipment manufacturers to develop products for the 28 GHz band. 5/

See, 47 C.F.R. §§ 21.701(a) & 25.202(a)(1). Motorola Satellite Communications, Inc. has proposed to use the 27.5-30.0 GHz band for fixed gateway/control satellite uplinks for its proposed IRIDIUM system (File Nos. 9-DSS-P-91(87) & CSS-91-010, Public Notice dated April 1, 1991, Report No. DS-1068). Harris claims that this proposed FSS use does not pose any reason for not going forward with the Petition. Petition, at ftn. 2.

<sup>3/</sup> Petition, at 3.

<sup>4/</sup> Petition, at 4.

<sup>5/</sup> Petition, at 4-5.

## IV. CHANNELIZATION OF THE 28 GHz BAND SHOULD NOT PRECLUDE USE OF THE BAND FOR MOBILE COMMUNICATIONS

Calling is aware of technology being developed to implement mobile telecommunications in the 28 GHz band, a co-primary allocation not yet implemented by Commission Rules.6/ Calling intends to adopt some of this emerging technology to implement its own service plan, and will soon file an application with the Commission for authority to utilize portions of the 28 GHz band.7/ Other entities are also believed by Calling to be planning other than fixed point-to-point microwave services in this band. Calling believes the Commission should evaluate the Harris Petition in light of all potential allocations in the band, and specifically not preclude mobile services.

# V. CHANNELIZATION OF THE 28 GHz BAND SHOULD NOT PRECLUDE OR HINDER INTRODUCTION OF OTHER MORE SPECTRUM EFFICIENT TECHNOLOGIES

Whatever channelization of the 28 GHz band is adopted for fixed point-to-point microwave use should not stifle innovative, spectrum efficient, and technologically sophisticated uses of the band. Other applications for the 28 GHz band include

<sup>6/</sup> See, 47 C.F.R. § 2.106.

Z/ Calling intends to files its application with the Commission before the end of 1991.

switched multi-megabit data service ("SMDS") for shared access data networks, wireless local area broadband networks for data, video and image transmission, and short haul applications uniquely dependent upon the propagation characteristics of the band. Further, high powered point-to-point service will cause serious interference with lower power density use of the band. Calling believes the Commission should act to encourage innovative, efficient and technologically advanced use of the 28 GHz band.

#### VI. <u>CONCLUSION</u>

Calling is not opposed to channelization per se, but remains concerned that other perhaps more efficient uses of this spectrum not be precluded. Harris identifies cellular interconnection as one of the driving market forces underlying its Petition. However, other personal communications services ("PCS") are evolving which also require interconnection links, links perhaps more efficiently provided in other frequency bands. Further, other potential markets to be served by the 28 GHz band are just now emerging. Calling believes that the Commission has a unique opportunity to foster

these developments by encouraging utilization of the 28 GHz band by a wide range of technologies to serve a variety of markets.

Respectfully submitted,

CALLING COMMUNICATIONS CORPORATION

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President

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June 14, 1991

#### CERTIFICATE OF SERVICE

I hereby certify that on this 14th day of June, 1991, I caused copies of the foregoing "Comments of Calling Communications Corporation" to be mailed via first-class postage prepaid mail to the following:

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